



Arubans Making History

First in a series of articles about Arubans whose achievements are affecting the world

By Rosalie Klein

Edward Cheung: Unlocking the Secrets of “Deep Space”

What few people realize when they visit our island paradise is that there are a number of individuals that have been born and raised in Aruba but have gone out in the world to accomplish great things, and make historic contributions in a variety of fields. They are artists, authors, poets, athletes, sociologists and scientists, and their contributions to the betterment of this world and society have made a place in the history books for themselves and Aruba.

One of the greatest sources of pride for the people of Aruba is Edward Cheung, who is the Principle Engineer of the Hubble Space Telescope Service Project. His work has been vital in keeping the telescope operative and innovative, designing and implementing the equipment that solved the initial problems that the space observatory displayed along with his team of fellow scientists, and managing to save the beleaguered project.

Recently Dr. Cheung was in Aruba for his annual end of the year visit with his mother Yok Fun, and his mother-in-law Rita Kock-Croes. During the two weeks he spends here with both his family and that of his Aruban born wife Agnes, he also gives of his time to the community from which he came. He visits local schools, encouraging the children to continue their education, and this year gave a lecture at the University of Aruba to a very enthusiastic and responsive audience on the Hubble Space Telescope. (HST)

Dr. Cheung was raised in San Nicolas, spending most of his time, he admits, around his grandfather's small establishment, The Fontein Rum Shop. His grandfather was brought from Hong Kong to Aruba to work in the Lago Refinery, and his grandmother followed him with Ed's father, Kong Ming, to escape the Second World War. Ed's father eventually opened his own grocery store, the Kong Ming Market, which would pay for Ed's education at the Worcester Polytechnic Institute where Ed did his undergraduate studies.

“An Aruban student getting accepted into an American school was very unusual at that time,” recalls Ed's School Councilor, Ans Visser. “Ed was a very quiet, shy person, and even though his grades were good, we did not realize what an outstanding scholar he could be until his ACT 2 test scores came back. Without any training or preparation he received a 760 on the physics tests, which is a nearly perfect score, and certainly made us pay attention.” Ans strong letter of recommendation helped Ed Cheung to be accepted to WPI and won the eternal gratitude of his father, Kong Ming, who had it framed.

From WPI, Ed went to acquire his Masters and PhD in Electrical Engineering from Yale University. His specialty was robotics, always with an eye to working in the space program. He earned his PhD with a scholarship provided by Philips Labs and NASA. In 1990 his doctorate dissertation was witnessed by a recruiter from NASA, resulting in a summer job at Kennedy Space Center, and his future was set. Though offered jobs at the Kennedy and Johnson Space Centers, Ed chose to work at Goddard Space Center, as this offered him the best chance “to put something into space.”

Eventually, this “something” turned out to be very historic for the island of Aruba. When problems cropped up with a very important part of the HST that affected the cooling system, a solution needed to be found. Something that would have normally taken months was produced in a few short weeks, and Dr. Cheung and his team devised the ARUBA box, or **A**SCS/**N**CS **R**elay **U**nit **B**reaker **A**ssembly, which was attached to the HST in the Spring of 2002, during the last successful mission of the ill-fated Columbia Space Shuttle. Dr. Cheung confesses that he devised the acronym to excite and stimulate interest in space and engineering amongst young students back on his home island. All Arubans watched with great emotion as the ARUBA Box mission was telecast worldwide.

Since then, Dr. Cheung has continued to make great contributions to the Hubble project and to Computer and Robotic Science. He has garnered a number of accolades for his designs and inventions, including the Internet Pic 2000 Award, honors from publications such Nuts and Volts, Express PCB and Home Automater, plus the Ichabod Washburn Award from his Alma Mater, Worcester Polytechnic. It was a proud moment for Ed when Astronaut John Grunsfeld pinned a Silver Snoopy Award on him for his contributions to the HST project, which he claims he never could have earned without the excellent work and cooperation of his team.

Ed spent five years with NASA before joining the Hubble team, and it took time to ascend to his present position of Principle Engineer. This past year he received his fifteen-year award from NASA, and his

responsibility is the actual design and creation of the hardware that keeps the telescope in orbit. It is his job to analyze and correct any anomalies. His present project is constructing the Wide Field Camera 3, which will be added on to the telescope during the next service mission in 2007.

Dr. Cheung's humble but loving origins are still reflected in his demeanor, as he is a very open, affable, and unaffected person despite his enormous success and accomplishments in his field. He honors and attributes the love and support of his parents for his success, and always recalls the words of his father "What you learn is yours forever" as a creed he has tried to instill in young Arubans during his yearly visits to the island.

This past summer, a science lab constructed in what is now a middle school in San Nicolas was dedicated to Dr. Cheung. This was the school where he attended kindergarten when he was four years old. He in turn, feels that the greatest honor is not that the lab carries his name, but that it carries the name of his parents, Yok Fun and Kong Ming *Cheung*. The fact that he can bring this honor to the name of his father evokes so much emotion in him that he can barely speak.

While in Aruba, he and his wife with their two children Stephanie and Christopher stay at the Blue Army Center, a Catholic Retreat that was opened and maintained by Agnes' mother Rita, who has also received accolades for her community work for the community of San Nicolas.

During his annual visits, Dr. Cheung donates a large portion of his time going to the local schools, distributing NASA stickers, giving lectures, and providing inspiration for the island's youth to continue their education and strive for excellence. He is sensitive to his position and the possible role model that he can provide. He is aware that his success can inspire another generation, and appreciates the spiritual rewards of doing so. "What truly made me aware of what I can do for the next generation was the death of my father," reveals Ed, "I led a fairly anonymous life on this island until then, a few articles had been written, but nothing much. I took on what I feel is an important mission at that time. I decided I would stand on a soapbox; I am going to do something for the name Cheung on this island, I am determined to see it does not die on this island, or fade away. When I had the honor of doing my Dad's eulogy, I saw the church was packed with people, and I thought, "I have to do this."

Dr. Cheung has accomplished his mission admirably, though it is still ongoing. All Arubans know the name of Edward Cheung, and when he gave his impromptu lecture during his visit this year, the hall was filled to overflowing with islanders eager to shake his hand and show their admiration. He is someone that parents can point out to their children and say "Do you see? You may come from the tiny island of Aruba, but you can be anything you want to be out in the big wide world." Dr. Cheung is proud to present that example, but he is also proud to show the world that he comes from humble beginnings, and his love for his homeland, Aruba.